

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-6 (Cancelled).

7. (Original) A method for manufacturing a FED with an integrated triode structure, the method comprising:

(a) forming, on a substrate, a cathode layer, a gate insulating layer, a gate electrode layer, and an aluminum layer, in order;

(b) converting the aluminum layer to an alumina layer using anodic oxidation, until the alumina layer has sub-microholes in a regular arrangement pattern and a barrier layer remained at the lower part of the sub-microholes;

(c) extending the depth of the sub-microholes in the alumina layer to the surface of the cathode layer;

(d) forming emitters in the sub-microholes, the emitters being adhered to the cathode layer;

(e) forming a phosphor layer on the alumina layer; and

(f) forming an anode layer on the phosphor layer under vacuum atmosphere.

8. (Original) The method according to claim 7, wherein step (a) further comprises forming a resistive layer on the cathode layer, in step (c), the depth of the sub-microholes is extended to the surface of the resistive layer and, and in step (d), the emitters are adhered to the resistive layer.

9. (Original) The method according to claim 7, wherein in step (b), the anodic oxidation comprises applying a positive voltage to the aluminum layer in aqueous solution of acidic electrolyte.

10. (Original) The method according to claim 9, wherein the acidic electrolyte is selected from the group consisting of oxalic acid, sulfuric acid, sulfonic acid, phosphoric acid, and chromic acid.

11. (Original) The method according to claim 7, wherein in step (b), the diameter of the sub-microholes is in the range of 4 to 500 nm.

12. (Original) The method according to claim 7, wherein step (c) is carried out using ion milling, dry etching, wet etching, or anodic oxidation.

13. (Original) The method according to claim 7, wherein in step (e), a phosphor is applied to the alumina layer using e-beam evaporation, thermal evaporation, sputtering, low-pressure chemical vapor deposition, sol-gel method, electroplating, or electroless plating.

14. (Original) The method according to claim 7, wherein the method further comprises increasing the diameter of the sub-microholes in the alumina layer by post-chemical treatment after step (b).

15. (Currently Amended) A method for manufacturing a FED with an integrated triode structure, the method comprising:

(a) forming, on a substrate, a cathode layer, a gate insulating layer, a gate electrode layer, an anode insulating layer and an aluminum layer, in order;

(b) converting the aluminum layer to an alumina layer using anodic oxidation, until the alumina layer has sub-microholes in a regular arrangement pattern and a barrier layer ~~remained~~ remains at the lower part of the sub-microholes;

(c) extending the depth of the sub-microholes in the alumina layer to the surface of the cathode layer;

(c1) removing the alumina layer[[s]];

(d) forming emitters in the sub-microholes, the emitters being adhered to the cathode layer;

(e) forming a phosphor layer on the anode insulating layer; and

(f) forming an anode layer on the phosphor layer under vacuum atmosphere.